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The Psychological Assumptions are Rarely Articulated



CIA VERSUS DOD: COMPETING MISCONCEPTIONS OF STRATEGIC ASSESSMENT *

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Aping the adversary's strategic capability "suggests to observers, not determination, but rather the lack of assurance of the frontier tenderfoot in the Western movie who carries two oversized guns to town to demonstrate his readiness for 'high noon'."

Maxwell Taylor.

Recent changes in American strategic doctrine have prompted shifts in the yardsticks used to gauge strategic sufficiency. The changes in doctrine have also led to a heightened perception of the importance of these measures. This paper examines measures of the strategic balance now in vogue in the Central Intelligence Agency and the Department of Defense. It argues that they are inaccurate, misleading, and even detrimental to the success of deterrence.

Strategic forces mean nothing in the abstract. They must be assessed in terms of the missions they are expected to perform. For the United States this mission has always been deterrence, although deterrence of what has never been altogether clear. From time to time officials have spoken of extended deterrence, supposing that American strategic forces could prevent or at least discourage military action by the Soviet Union against the United States and its allies. At other times, these forces have been described as having the more circumscribed task of deterring a nuclear attack upon the United States. Former Defense Secretary Harold Brown's statements in his last Annual Report for 1981 illustrate the fuzziness that surrounds the official conception of deterrence. Twice in this document he declares: "Despite some initial illusions, most of us have recognized for many years that strategic nuclear capabilities alone could only deter a narrow range of contingencies." These he defines "as nuclear attacks on the United States, our forces overseas, and on our friends and allies." On the same page, however, where this statement appears the second time, he states that "Nuclear forces also contribute to some degree, through fear of escalation, to deterrence of nonnuclear attacks." Sandwiched in between two iterations of the first statement is yet another pronouncement on deterrence that extends its scope even further. The Secretary declares that it is capable not only of "discouraging reckless action in a crisis" but of "minimizing aggressive behavior over the long term." [1]

To be fair to Harold Brown, we must acknowledge that his lack of precision about the political utility of strategic forces is but a reflection of the ambiguity on this subject in the government, the media, and academia. In part this is due to the nature of the beast; it is very difficult to know just what impact a state's strategic arsenal has on its friends or adversaries. But such ambiguity also reflects our failure to develop adequate theory about the psychological relationship between threat and response and force and will. In the absence of good theory, efforts to determine the utility of

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deterrence often verge on the tautological. The official literature is full of statements to the effect that "deterrence has worked because the Russians have not invaded Western Europe." Even more sophisticated attempts to assess deterrence generally fail to spell out either the psychopolitical mechanisms by which it is supposed to operate or the levels at which it is assumed to be effective. [2]

These studies fail to provide a logic for formulating strategic missions or designing force structures. Successive administrations have accordingly succumbed to the temptation of devising strategic doctrine in response to the capabilities of their weapons. This is a complete reversal of the Clausewitzian dictum that military capability should reflect the political objectives it is designed to achieve. Nothing illustrates this point better than Presidential Directive 59. The new doctrine was little more than a recognition of the ways in which a series of incremental technological changes transformed the capabilities of American strategic forces. Each increment of change was the result of an innovation that improved the performance characteristics of some component of those forces. Collectively, these improvements give the United States the capability to carry out a sophisticated range of counterforce options into the Single Integrated Operational Plan (SIOP). Doctrine was belatedly developed and promulgated by the Defense Department and the White House to take these changes into account. It was made public at a time the Carter administration hoped to impress the public with its toughness toward the Russians. [3]

Strategic

Even though successive administrations have not been clear about what they hope to deter, they have not hesitated to redefine the force requirements thought necessary to do the job. In the 1960s, when McNamara decreed that the ability "to destroy the Soviet Union as a 20th century nation" was sufficient to guarantee deterrence, strategic sufficiency was measured in terms of the capability to wipe out an arbitrarily determined number of Soviet cities. As the Russians possessed no capability during most of this period to attack the continental United States, little thought was devoted to the credibility of the US commitment to use nuclear weapons in retaliation. American strategic planners could also be confident about their ability to attain their stipulated operational objectives as the Soviets lacked the means to defend themselves against bombers and, later, nuclear submarines and intercontinental missiles. The ability of bombers to penetrate Soviet air defenses was the only question that aroused enduring concern. But this was partially allayed by the redundancy of American delivery systems and for a while the relative invulnerability of ICBMs and SLBMs.

The adoption of "essential equivalence," an outgrowth of the SALT process, led to a corresponding shift in the standards used to determine strategic sufficiency. As a doctrine, essential equivalence divorced the meaning of strategic forces from the wartime missions these forces might be called upon to perform. Instead of using mission as a yardstick as McNamara had, the Nixon and Ford administrations sought to assess strategic sufficiency by comparing American forces to present and projected Soviet force levels. Several static comparisons of forces were devised for this purpose, among them numbers of missiles, launchers, deliverable warheads, and equivalent megatonnage. [4]

Static indicators proved to be inescapably murky measures of strategic sufficiency. They ignored the reality that both the Soviet Union and the United States had developed their forces in response to different political needs, exploited different levels of technology in their design, and developed different doctrines for their employment. Soviet and American strategic forces represent the expression of two different societies, each with its own political-military tradition, distinctive world

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view, and means of evaluating its security. Direct force comparisons, regardless of the particular measures used, are largely meaningless. As the SALT debate revealed, they also have the disadvantage of being politically very charged.

For these reasons the Intelligence Community, the Department of Defense, and the Carter White House became disenchanted with both essential equivalence and static indicators. In January 1979 Harold Brown summed up this consensus in the introduction to his Annual Report: "In designing our strategic nuclear forces, what we need for deterrence and stability cannot be dictated by any simple comparison with the forces of the Soviet Union, even though we must take those forces into account in our planning." [5] In the place of static indicators, defense planners and intelligence analysts developed more dynamic measures of the strategic balance, measures that attempt to take into account the performance characteristics of the forces on both sides. This dynamic analysis attempts to calculate the results of both sides allocating strategic forces against specific target sets. It uses the outcomes of these theoretical exchanges to describe the existing state of the strategic balance and offers them as benchmarks against which to formulate strategic needs.

The appeal of dynamic measures of strategic sufficiency has been enhanced by recent changes in doctrine. The "countervailing strategy" is based on the premise that deterrence requires the United States to be able to deny the Soviet Union any possible relative advantage that it might derive from a nuclear war, limited or all-out. The doctrine emphasizes the targeting of Soviet missile sites, command and control centers, and other military assets. Static indicators of the strategic balance are incapable of shedding light on the extent to which the United States can destroy these targets. Qualitative asymmetries in the strategic forces of the two superpowers also mean that static indicators are useless as a means of determining their relative capability to destroy given target sets. Dynamic analysis seeks answers to both these questions through the mechanism of theoretical force exchanges. It attempts to assess absolute capability in terms of the damage each side can inflict upon the strategic, military, and economic assets of the other. It measures relative capability as a function of the destructive potential each side retains after absorbing a first strike.

Dynamic measures have been made the cornerstone of the most recent efforts by the Central Intelligence Agency, the Studies and Gaming Agency of the Joint Chiefs of Staff, and the RAND Corporation to determine the relative strategic capabilities of the United States and the Soviet Union. The CIA, which pioneered the use of dynamic analysis, has employed it in its National Intelligence Estimates of Soviet strategic capabilities (NIE 11-3-78 and NIE 11-3-81). In these Estimates, Agency analysts calculate the potential of each side's ICBMs to attack the retaliatory forces of the other and then model such attacks in order to determine residual destructive potential. Residual destructive potential is defined as the gross number of missile reentry vehicles (RVs) and bomber weapons that each side could be expected to retain after having been attacked. These remaining weapons are then compared on the basis of their lethal area potential and hard-target potential, that is, in terms of their utility against both area and point targets. These estimates are calculated under conditions of surprise and preemption. Surprise refers to a "bolt from the blue" attack, launched when both sides were in a day-to-day attack, that arises out of a crisis situation in which both sides have generated forces. [6]

The National Intelligence Estimates that incorporate this analysis make no pretence that it reflects the outcome of an actual nuclear exchange. The Estimates acknowledge several ways in which it is artificial. First of all, there are the kinds of forces used. Only ICBMs and SLBMs—and bombers for the Americans—are employed in the initial strike, and they are all targeted against the other's missile silos,



bomber bases, and submarine pens in order to reduce as much as possible its retaliatory capability. In a real attack both sides, but especially the United States, could make use of other kinds of forces. The United States has significant strategic assets in Europe and the Far East, on land and at sea, that could be used to augment a strike against the Soviet Union.

Most strategists also expect that both superpowers would attack a wider range of targets than missile pads and bomber and submarine bases. Soviet and American doctrines explicitly call for the destruction of each other's military assets, in particular their command-and-control facilities and conventional force capabilities. The estimates also use admittedly arbitrary targeting doctrine; two-on-one ICBM attacks on silos and one-on-one attacks against the projected MX shelters. As with the choice of targets this is a reflection of the damage-limiting objective assumed for the purposes of the analysis to motivate both sides. For the same reason the Estimates assume that both sides ride out a first strike, whereas in a real exchange it seems more likely that they would attempt to launch from underneath an attack. The Soviets actually espouse a "launch-on-warning doctrine" and have made considerable strides in the last few years toward developing the capability to do this. Finally, the estimates make no attempt to calculate the reliability and accuracy of systems or of command-and control networks in wartime conditions. The figures used reflect peacetime performance and are based on the results of tests that both sides carry out under relatively ideal conditions.

CIA Versus DoD: How they differ

For some or all of the reasons noted above many strategists are dissatisfied with the results of the CIA's strategic analysis. Liberal critics charge that the Agency's admittedly unrealistic assumption of a damage-limiting strategy for both sides has the effect of exaggerating American vulnerabilities to a Soviet first strike. Conservative critics allege that the Agency model minimizes the Soviet threat by failing to take into account more realistic and advanced Soviet preparations to fight a nuclear war. The Defense Intelligence Agency and the senior intelligence officers of the military services have gone on record with this complaint.

The Agency defends its dynamic analysis in terms of its contribution to assessing the efficacy of the American deterrent. The key requirement for deterrence, as defined by successive Secretaries of Defense, is the capability of the United States to absorb a first strike and still retain sufficient forces to destroy a broad mix of Soviet targets. The CIA argues that residual destructive potential, calculated in both absolute and relative terms, is the most direct measure of this capability and that trends with respect to it are an appropriate indicator of the overall strategic balance. Put another way, deterrence is above all a psychological phenomenon, a state of mind that results from the belief of Soviet and American leaders that they have everything to lose from a nuclear war. The assumption is that leaders' perceptions of the outcome of a nuclear exchange do not derive from a detailed understanding of what might really happen in such a conflict but depend upon an abstract and relatively simple conception of the strategic balance. To the charge that its analysis is artificial, the Agency could reply that its purpose is not to simulate an actual exchange but to derive numbers for an idealized measure of strategic balance—residual destructive potential—that itself has more symbolic than operational significance.

The Defense Intelligence Agency (DIA) and the three services with strategic missions insist that only the analysis of a comprehensive two-sided exchange, modeled on more realistic assumptions about doctrine and performance, can convey valid impressions about the relative strategic capabilities of the superpowers. This may be



true but such an approach is entirely scenario dependent. In addition to knowing who launches the first strike and whether one or both adversaries have their forces generated or on day-to-day alert, it requires detailed knowledge of their attack-and-response strategies as well as accurate information about the wartime performance of their weapon systems and command-and-control networks. There is no consensus in the strategic community as to how to estimate the outcome of such a conflict. The problem is compounded by the fact that a nuclear war fought in the late 1980s would involve weapon systems that have not yet been deployed, or even tested in some instances, by either side. Nevertheless, the choice of attack strategy and the assigned performance characteristics of the weapons used determine the results of any simulation.

The uncertainty associated with efforts to make a realistic model of a "comprehensive" exchange of forces deprives such estimates of much of their analytical value. An analyst can come up with almost any outcome he wants if he chooses the appropriate doctrine, rules of engagement, or indices of operational performance. The nature of this problem is readily apparent in the reaction within the strategic community to efforts carried out under Defense Department auspices to model-a nuclear conflict. Briefings on these exercises rapidly degenerate into heated confrontations about the methods and numbers used to build and test the model. If American strategists cannot agree among themselves about how to simulate a nuclear war, it is reasonable to suppose that whatever consensus the Intelligence Community eventually reaches will bear only a chance resemblance to the conclusions of their Soviet counterparts, who would approach the problem with their own doctrinal assumptions and data bases. The entire purpose of assessment, however, is to analyze relative strategic capabilities through Soviet eyes in order to assess the health of our deterrent. When confronted with this dilemma, the artificiality of the CIA analysis, singled out as its major drawback, might fairly be described as its greatest virtue.

On one level the conflict between the CIA and the Department of Defense is a struggle over turf: the services contend that the Agency's dynamic analysis represents a "net assessment," a prerogative of the Defense Department. But the conflict also represents the clash of two different intellectual approaches to the problem. The CIA approach stresses the importance of the psychological roots of deterrence. Agency analysts have accordingly constructed stylized scenarios for force exchanges that are keyed to this conception. DIA and the services conceive of deterrence in more operational terms. They accordingly want to calculate, as realistically as possible, the likely outcome of a nuclear exchange. For them the most important indicator of deterrence is the military balance that would prevail after the mushroom clouds dissipate, measured not just in terms of total forces but in the relative capability of each side to use those forces in a coordinated and intelligent manner.

Proponents of both approaches justify their choice by asserting that it more closely approximates the way in which the Soviets assess relative strategic capabilities. The military and its supporters argue that Soviet adherence to a war-fighting doctrine coupled with the preparations they have allegedly made actually to fight a nuclear conflict reveal the need to assess deterrence in terms of the outcome of such a war. CIA analysts who favor more abstract measures of strategic capability stress the deterrent objective of this war-fighting doctrine. In point of fact, Soviet intentions and even more so, their judgments about our capabilities and intentions are sufficiently obscure to permit analysts to make a case for either point of view. This leeway tends to make strategic assessments theological exercises carried out to advance the parochial interest of the institutions the analysts represent. Even when this is not the case, assessments still tend to reflect ingrained institutional ways of looking at the world. Put crudely, the sevices are socialized into judging everything in terms of military

capabilities, while analysts at CIA, depending upon their particular office, display varying degrees of sensitivity to the political side of things. Individual analysts in each of these institutions on the whole are more sensitive to information that suggests that the Soviets see the world in the same way that their particular subunits of the bureaucracy do.

CIA and DoD: What They Have in Common

So far our investigation has focused on the ways in which the CIA and Defense conceptions of assessment differ. But there are also important underlying affinities between them. Both assess deterrence as principally a military relationship. Both use relative residual military capability, albeit calculated in different ways, as their measure of that capability. Both assume that this approach to deterrence reflects the Soviet way of thinking. The approaches differ only in their technical details, in the kinds of residual capability that are considered important, and the ways in which they are to be measured.

The psychological assumptions that the two approaches share are rarely articulated, let alone critically evaluated by those who use them. The reason for this is probably the lack of controversy associated with them within the intelligence and policymaking community. By contrast, the kinds of residuals that are important and the means of determining them have been the subject of extensive analysis because of the controversy that surrounds them. The nature and validity of their psychological assumptions are nevertheless the more important questions, for the choice of assumptions has more bearing on the outcome than the choice of means used.

The psychological assumptions common to both the CIA and Defense approaches to strategic analysis do not stand up under scrutiny. Take the use both make of residual military capability. There is nothing wrong with residuals per se; they indicate something about the military balance that might prevail in the aftermath of a strategic exchange. Both approaches, however, go far beyond this by attempting to employ residual capability as a measure of will.

Nuclear deterrence depends upon an adversary's belief that his opponent, if attacked, will carry out his threat to use nuclear weapons. Both the CIA and its Defense Department critics assume that the best indicator of the probability of that response is the relative strategic capability of the adversaries. The costlier the response, the less likely it becomes. Both sets of analysts believe that deterrence will no longer be credible if the relative cost of reprisal is very great. In such a situation they conceive of the deterrer as being deterred from retaliation by virtue of the superior strategic power of his adversary. This is the principle of which Paul Nitze and others have based their scenarios of a disarming Soviet first strike. They worry that if the Soviets destroy the Minutemen, and with them the American counterforce capability, the President would be compelled to accept the attack as a fait accompli because retaliation against Soviet cities, his only real option as they describe it, would elicit equal if not more destructive retaliation in return. [7]

While cost is certainly one component of will, it is wrong to assume that it is the only component or even the most important one. The measurement of will in terms of cost reflects a narrow formulation of the decisionmaking process. It rests on the assumption that people, national leaders in this instance, maximize their "utility" regardless of the stress or uncertainty associated with a decision and its possible outcomes. It further assumes—and this is quintessentially American in approach—that utility can be equated with material and physical well-being. This disregards a host of other values—emotional, intangible, unquantifiable—that history reveals to be at least as important for most people, including Americans. Would the South, for example,

have rebelled if material well-being and physical comfort were the primary concern of its leaders and people? Why did the Confederacy continue the struggle at tremendous human and economic cost long after leaders and soldiers alike recognized it to be a lost cause? Any number of other instances can be cited where a people wittingly fought a determined struggle against great or even impossible odds. From Masada to the Irish Easter Rising, from Thermopylae to the resistance of the beleaguered Finns in 1940, history records countless stories of peoples who waged costly struggles with little or no expectation of success. Honor, anger, or national self-respect provided more compelling motives for action than did pragmatic calculations of material loss and gain. At the same time, the French experience in Algeria and that of the American debacle in Vietnam reveal, if ever proof were needed, that superior, even vastly superior military capability, is no sure indicator of resolve. [8]

National will is a social amalgam of many components. Among the most important of these are probably the nature of the adversary, what people believe is at stake, the cohesiveness of the society, its historical traditions, and the character of its leadership. Depending upon the circumstances, any of these considerations can be more influential in determining national will than calculations of relative military capability. Several examples will illustrate this point. In 1882 the British fleet subdued Egypt by firing a few cannon balls at the Khedive's palace in Alexandria. In 1956, following the massive and successful Suez invasion, the British and French withdrew from Egypt because they were forced to recognize that their armies were relatively useless weapons against aroused nationalist opinion. In 1940, France was defeated rapidly because the rise to power of Hitler had aggravated the deep and bitter cleavages within French society, cleavages that came close to paralyzing its army and government. Britain, by contrast, became a more cohesive society in response to the Nazi threat. Even if Germany had successfully invaded the British Isles, it is likely that its people would have continued to resist domination. The Czechs and the Poles also provide contrasting examples of national will, in this case perhaps attributable to different national traditions. Twice in recent memory, in 1938-39 and 1968, Czechoslovakia capitulated without a fight. In 1938, Prague had the military means to resist and possibly force France and Britain to come to its aid. The Poles waged fierce and futile struggles against foreign domination in 1848, 1939, and 1944-45. The expectation that they would do so again has probably prompted Soviet leaders to exercise more caution in the current crisis than might otherwise have been the case.

These examples should make apparent that there is at best only a marginal association between military capability and national will. It is therefore quite erroneous to use a measure of relative military capability to determine whether or not the United States would respond to a Soviet attack. It is also farfetched to assume that the Soviets would calculate American intentions in this way; that in the aftermath of a Soviet nuclear strike they would expect an American President to tote up the residual megatonnage or RVs of both sides and sue for peace or even surrender if his side came up short. If the Soviets behaved this way, they would have rolled over and played dead in 1941 following the initially devastating results of Hitler's onslaught against them.

By dint of their own national experience, Russians, more than most people, might be expected to understand the role of leadership and morale—what they refer to in their writings as "moral forces"—in determining the resolve of an army or people. Soviet leaders are likely to ask themselves just how much would the American people be prepared to sacrifice in order to preserve their influence in Europe, the independence of their closest allies, or their own domestic integrity? What about the administration's mettle? Is the President the kind of person to recoil in horror from using America's nuclear arsenal regardless of the circumstances, or would he have the



courage or insanity—take your pick—to give the launch order in response to a Soviet attack or even confirmed preparations for an attack? Given the incredibly stressful context in which such a decision would be made, the character and personality of the President is almost certain to be a more decisive factor in influencing the decision to launch than arcane calculations of relative military advantage handed to him by a military adviser. The extent that Soviet leaders take such considerations into account, or at least recognize their importance, their analysis of resolve is more in accord with the realities of human behavior than the narrowly technical approach of their American counterparts.

The preceding discussion indicates that most of the really important components of resolve are scenario dependent. This brings us to our second important criticism of the use of residuals as a measure of deterrence: they measure the results of war in terms of the means by which it is waged instead of the ends it seeks to achieve. This divorces military conflict from the political context in which it occurs and from which it derives meaning.

Wars rarely start because one side believes that it has a military advantage. They occur when leaders become convinced that force is necessary to achieve important goals. War, as Clausewitz observed—and the Soviets proclaim—is an extension of politics by other means. Its scope, strategy, and timing are determined, or ought to be, by the political objectives for which the war is fought. It follows from this that any assessment of deterrence must be predicated upon some notion of the objectives that the Soviet Union might go to war to achieve. Only then can we attempt to determine what must be done to deny the Soviets these objectives and thereby deprive them of whatever incentives they might have for going to war.

Soviet objectives are an extremely contentious question and perhaps the reason why analysts have shied away from this approach. Paul Nitze, Richard Pipes, and other "Team B" types argue that the Soviets are out to conquer the world and are willing to pay the necessary price to do it. Most analysts take a more moderate view; they argue that Moscow would only resort to war to protect its vital interests. Needless to say, there is no agreement among even these analysts as to the nature of these interests or the ways in which a war might come about.

One way around this problem might be to recognize that the "bottom line" for the Soviet Union, indeed for any country, in a nuclear war must remain the preservation of its political system and territorial integrity. This would be the primary objective in a defensive war and the obvious precondition for the attainment of objectives in an offensive war. Recognition of this reality has important implications for deterrence because the preservation of a state's political system and territorial integrity is likely to be a much more difficult task in a nuclear war than in a conventional one.

A nuclear war between the superpowers is almost certain to far exceed the most ferocious conventional war in its destructiveness. Even a "limited" nuclear war between the superpowers consisting only of strictly counterforce exchanges can be expected to leave perhaps 20 million dead on each side. A more general exchange could kill more than 100 million people in each country and deprive the survivors of the means of restoring their standard of living within their own lifetimes. To the physical destruction of nuclear war, whether limited or general, must be added the psychological incapacitation of the survivors. This is a phenomenon as yet little understood, but nevertheless likely to have a serious retarding effect upon a society's ability to reconstitute itself.

We have no data on the social consequences of a massive nuclear strike. Hiroshima and Nagasaki, mankind's only experience with nuclear warfare, were mere pinpricks in comparison to the death and destruction that would result from even a limited nuclear exchange between the superpowers. Because of our lack of knowledge about the social and psychological repercussions of nuclear war—and perhaps for fear of what we would discover—the American strategic community has largely ignored this aspect of the problem. Instead strategists have based their calculations and their doctrine on technical phenomena about which they feel more confident. Residual weaponry, circular errors of probability, and blast overpressure have been made the bedrock of American strategic analysis. Such an engineering approach to the subject has blinded analysts to some important social truths about nuclear war.

The first of these pertain to the disruptive destructive effects of nuclear war upon society. These are certain to be greater than is recognized by the official or quasi-official literature on the subject. As it is, these estimates of damage have been criticized for minimizing fire and radiation fatalities and for disregarding deaths arising from secondary causes such as the disruption or even breakdown of public order and sanitary, medical, and food distribution facilities. Some recent studies suggest that postattack deaths may not peak until a week or more after an attack. Yet most official casualty projections calculate only first-week fatalities. Most, if not all, of these estimates also ignore the psychosocial cost of a nuclear holocaust, the price paid not by the victims but the survivors. [9]

Robert Jay Lifton, who studied the survivors of Hiroshima, identified what he called the "death in life" syndrome: "a grotesque, absurd, collective, unacceptable, and unabsorbable death" that survivors carry with them for the rest of their lives. [10] Even those who were able to pursue successful careers continue to be affected by "an unending lethal influence," a sense of being the victim of a force that threatens the species. Hiroshima, it must be emphasized, was the victim of a primitive low-yield weapon and subsequently, the recipient of long-term medical, economic, and social assistance from a society left untouched by nuclear devastation. The psychological aftereffects of a nuclear war between the superpowers are certain to be more pronounced and more widespread than those associated with Hiroshima. They may pose as great a challenge to the long-term survival of a society as the physical destruction caused by blast, fire, and radiation does in the short term.

Nuclear war may leave survivors in such a profound state of shock that in its immediate aftermath they cannot respond to whatever political and military authority is able to reassert itself. This phenomenon will be all the more likely to occur if people have not been adequately prepared beforehand for the horrors of the postattack environment. Survivors who are not psychologically incapacitated may be very hostile to authority if they see it as responsible for the catastrophe. In conventional wars governments usually attempt to rally support by portraying themselves as the defender of all that is sacred.

Conventional wars retain a human flavor regardless of their scale or level of destruction. Combatants and civilians are aware that everything that happens, no matter how unintended in consequence, is the result of human decisions and action. [11] They also "learn" something about the enemy in the course of the war, either firsthand or through the media. They can form an "enemy image" upon which to displace their own frustrations, insecurities, and aggressive drives. Knowing this, governments have often gone to war to deflect such hostility from themselves. They also count on the enemy's actions, for example, bombing raids or atrocities against civilians, to rebound to their domestic political advantage. As the German onslaught against Russia in World War II revealed, even the most unpopular government can, in the long run, benefit from the depredations of a barbarous invader.

An intercontinental nuclear war will be different. It will be short, perhaps lasting only hours or days. It will also be highly impersonal, as neither the adversary who pushed the button nor the missiles that deliver his warheads will be seen. There may be no combat at all in the traditional sense, and certainly none that will impinge upon the consciousness of the heartland populations. This will deprive soldiers and civilians alike of a palpable image of the enemy, so necessary to make the devastation of war psychologically comprehensible.

Nuclear war will also differ from conventional war by virtue of the magnitude of its destruction. The psychological effects of say 20 million dead in the course of an hour and a half are certain to be different and greater than the impact of the same number of fatalities sustained during the course of four years of war. This combination of impersonality and instantaneity may make nuclear war more closely resemble a natural disaster than a war in the minds of the survivors. If this is true, it may have some hitherto unanticipated but important political consequences. Studies of natural disasters reveal that those who warned of disaster are likely to become the focus of acute hostility when their predictions turn out to be correct. [12] This is so, one psychologist speculates, because people tend to interpret disasters as forms of personal punishment and warnings as threats of punishment. [13] Thus, a government that attempts to prepare its people for the possibility of a nuclear war during an escalating crisis may be punished by the survivors as a result.

The preceding argument is admittedly speculative. It highlights, however, a second important truth about war in general and nuclear war in particular: the survival of any political system in war is at least as much a function of its legitimacy as it is of its military capability. To the extent that a government is seen as culpable for war and by extension for the damage resulting from it, its chance of survival diminishes. This is one more reason why, for purposes of assessing deterrence, military means cannot be divorced from the political context in which they might be used. This will determine whether or not a government will be supported by its people, and such support seems essential for postattack conventional military operations.

Astute statesmen have always been sensitive to the need to develop and maintain public support in war. Bismarck's manipulation of the Hohenzollern candidacy and his editing of the "Ems dispatch" are often cited as examples of how a clever political leader can manipulate an adversary in order to generate public enthusiasm for war. Our own national experience offers examples of how public opposition to war can act as an effective check upon leaders. Woodrow Wilson was prevented from entering World War I until Germany's unrestricted use of submarines in 1917 brought American public opinion around. Franklin Roosevelt was even more constrained by public antipathy to intervention in World War II. His constitutionally dubious and intentionally provocative efforts at goading Hitler into declaring war on the United States got nowhere until the Japanese bombed Pearl Harbor. More recently, the American failure in Indochina was at least in part attributable to the inability of successive presidents to maintain popular support for that war.

While democracies are more vulnerable than authoritarian governments to the vagaries of public opinion, the latter must also demonstrate some degree of sensitivity to public sentiment in order to maintain support for military sacrifices. Stalin was aware of this need and in the fall of 1944, for example, gave considerable pause before advancing beyond the borders of the Soviet Union into Eastern Europe for fear of its effect upon Soviet conscripts. [14] Afghanistan may yet illustrate the vulnerability of the Soviet system to public opinion if the Red Army continues to sustain a steady rate of casualties without bringing an end to that war.



The staggering loss of life and destruction that can be expected to result from even a limited nuclear war make it advisable, perhaps even essential, for leaders, regardless of what kind of political system they manage, to "prepare" their people for such an event. This would require educating the public about the nature and effects of nuclear war. A carefully orchestrated public relations campaign designed to convince people that their government, if it resorts to nuclear weapons, will do so only as a last desperate measure in defense of the country might also be considered. Serious efforts to prepare people for nuclear war, however, are likely to be psychologically unsettling to those being instructed and politically damaging to those responsible for the instructing. Perhaps for these reasons neither the United States nor the Soviet Union, which has an extensive civil defense program, have chosen to enlighten their population about the realities of nuclear combat.

The survival of a political system in wartime and its ability to reconstitute itself in the aftermath of nuclear attacks are also influenced by conditions independent of the specific political context of the war. The previous legitimacy of the regime, the nature of its economic base, the extent of its ethnic or racial tensions—what Stalin might have called "permanently operating factors"—will play a crucial role in this regard. Any assessment of deterrence must take them into account, not only objectively but more importantly in terms of how they are perceived by the adversaries. This is admittedly another difficult task. A useful beginning can nevertheless be made by describing some of the most important of these factors and the ways in which they might retard or facilitate the respective political and economic recovery of the superpowers from a nuclear war.

Viewed from this perspective the Soviet Union has a number of vulnerabilities that could pose serious difficulties for its leaders in the aftermath of a nuclear conflict. For a start, there is Eastern Europe. The Soviets are not popular in any of these countries with the possible exception of Bulgaria. In Poland and East Germany they are loathed by the local population. Both countries are astride the main communication routes between the Soviet Union and Western Europe, the most likely theater of conventional operations. Hostility and obstruction—perhaps even tolerated by local authorities in Poland—could cause serious problems for the Soviet military. If the Soviet Union were greviously wounded by a series of nuclear strikes, some of the satellite governments in Eastern Europe might seize the opportunity to establish their independence from Moscow. The prospects for this could be substantially enhanced by a Western targeting strategy designed to destroy the tentacles of Soviet power in these countries while leaving the national armies and industrial plants and population centers relatively intact.

Beyond Eastern Europe, the Russians face considerable opposition within their own multiethnic empire where their political primacy is resented in varying degrees by the other nationalities. In wartime the Soviet nationality problem could become acute if dissident nationalities perceived the central government's power to be waning. Resistance to Bolshevik domination in the Civil War and to Soviet rule in World War II followed this pattern. In this regard, some of the dissident nationalities would profit from the fact that European Russia is certain to suffer more devastation than Soviet Central Asia because of its denser concentration of military and industrial targets. The Muslim and Caucasian minorities in particular can be expected to fare much better than their Russian counterparts in terms of their physical survival, usable resources, and access to food. Dissident Muslims and other rebellious groups throughout the Soviet Union would also profit from the fact that Soviet conventional military capability, especially its command and control, will be targeted for destruction in any conflict other than the most limited nuclear exchange.





Restive nationalities would also benefit from their geographic location. Most of them reside along the peripheries of the Soviet Union and, in many cases, alongside states that harbor territorial irredenta against the Soviet Union. The number of such states has increased since the physical expansion of the Soviet Union during and immediately after World War II. One must assume, as the Soviets probably do, that some of these states, perhaps China, would be tempted to take advantage of Soviet weakness to make good their claims.

Economically, the Soviet Union is also susceptible to the disruptive effects of a nuclear war because of its highly centralized economy. Planning, production, and distribution decisions are made by ponderous bureaucracies at the several levels of the Soviet hierarcy. Seweryn Bialer comments: "The key characteristic of the Stalinist model of economic growth was its lack of economic self-generating, self-regulating, and adjusting features. To run at all, let alone to perform well, it required an enormous political edifice to provide the decisionmaking and the push, the regulation, supervision, and coordination." [15] The need for direction from above remains the hallmark of the Soviet economy. Its hierarchical structure permits political leaders a range of economic choices denied to leaders in a capitalist society, but it is also more vulnerable to disruption.

The economy of the United States might be likened to a worm. Cut off any part, even its head, and the rest continues on and even regenerates the missing section. The Soviet economy in contrast more closely resembles an animal with a highly developed central nervous system. It is capable of complex behavior based on the coordinated efforts of its many parts, but sever its spinal cord and the rest of the beast quickly dies. During World War II the Soviets performed prodigious feats in moving entire industries away from battle zones and reconstructing them in safer rear areas, brick by brick and factory by factory. They could do this because their administrative apparatus was intact and able to coordinate and coerce the labor force. A nuclear war would decimate or disrupt the functioning of these cadres so that surviving centers of production would be without organized access to raw materials, energy, or markets. Economic reconstruction, especially in the initial postwar period, could be a slow and tortuous process.

The Soviets seem aware of their economic vulnerabilities. Their civil defense program aims at protecting not only the political leadership but economic managers and workers in key industries. Plans for protecting the economy and thereby enhancing Soviet capability for postattack recovery include the evacuation, dispersal, and sheltering of economic cadres and the emergency shutdown and relocation of essential industrial installations to low-risk areas. The Soviets have also developed some procedures for evacuating cities and resettling their populations in the countryside, although these measures have never been rehearsed. Evacuation, if successfully implemented, would significantly reduce immediate casualties in a war in which cities were attacked.

Critics of "Mutual Assured Destruction" have pointed to the Soviet civil defense program as an indication of Soviet willingness to fight a nuclear war. [16] This is a very questionable assertion. A moderate civil defense program, a fair description of the Soviet effort, is no more a sign of intent to wage war than fastening a seat belt in a car indicates a willingness to have an accident. Both are prudent preparations for undesired, even feared, outcomes that the actors in question may believe is beyond their power to avert. It may be more revealing to inquire whyAmericans tend to reject both seatbelts and civil defense.

More pertinent to our point is the question of just how much benefit the Soviet Union would derive from its civil defense effort in a nuclear war. This is clearly



beyond the scope of the article. For the sake of our argument, however, it is useful to touch upon some of the more important aspects of this question. The first of these is the fact that all major Soviet civil defense plans require hours to days of advance warning to implement. They would be useless against an American "bolt from the blue" or in preparations for a similar Soviet strike, as they would telegraph Soviet intentions well in advance of the attack. Large-scale American economic reconstruction would also benefit from a redundant transportation system. The thick net of highways, a questionable luxury in peacetime, would prove indispensable in the aftermath of a nuclear war. The highway system is so developed that enough of it may survive to allow the minimum necessary movement of goods and people to begin reconstruction. In the Soviet Union where transportation relies principally upon railroads, the destruction of major railheads and bridges would more effectively halt movement. Communications with the Soviet Far East would become all but impossible as the only land route connecting it to European Russia is the Trans-Siberian Railway and the as yet unfinished Baikal-Amur line. The US highway system confers another advantage: it has facilitated the more even geographical distribution of the means of production. This enhances the prospects of some industrial base surviving even a second wave assault. Soviet industry by contrast is much more concentrated, as it has developed along major rail lines. Missile sites and major military installations are similarly situated, making Soviet industry more vulnerable to collateral damage in a limited nuclear war.

Conclusions

The preceding discussion has brought out three important attributes of deterrence. All of them reveal the inadequacy of residual military capability, however derived, as a comprehensive measure of strategic assessment.

First of all, military capabilities reveal nothing about resolve. Resolve is a function of leadership, a people's traditions and expectations, and their perception of what is at stake. Strategic analysis that ignores the political context of a war is meaningless for any purpose other than testing and developing operational capabilities. Unfortunately most American analysts adopt this narrow approach. This is reflected in official assessments of the strategic balance which analyze decisions for war or peace in terms of technical calculations of relative military advantage.

Secondly, the ends of war—not its means—should be the yardstick of strategic analysis. The minimum objective of any state in a nuclear war is almost certain to be the survival of its political system and the maintenance of its territorial integrity. The Soviet Union may be more vulnerable than the United States in this regard by reason of its centralized economy, hostile neighbors, and restive minorities. For the United States, therefore, deterrence rests at least as much upon its relative ability to recover politically and economically from a nuclear war as it does upon its relative military capability to inflict damage. One can fairly dispute the precise advantage that either superpower enjoys with respect to recovery or the extent to which they accurately perceive the reality of their situation. Any assessment of deterrence that ignores such considerations, however, is incomplete and misleading.

Finally, nuclear war, even limited nuclear war, is certain to be more destructive than most studies of the subject acknowledge. For in addition to the immediate effects of blast, fire, and radiation there are the longer term effects of radiation, the breakdown of health care, food processing, and distribution systems and the psychological impairment, temporary and permanent, of the survivors. Historians suggest that it took almost a century for Europe to recover from the effects of the Black Death. The effects of a nuclear war could prove more enduring.





Leaders of nuclear nations are more likely to be deterred from using nuclear weapons if they recognize the staggering and perhaps incalculable costs of nuclear war, regardless of its relative outcome. Awareness of these costs may—and should—constitute a more potent deterrent than any degree of relative nuclear advantage. If this is so, the current fixation on military capability is not only misleading but dangerous. (Confidential)

References

- 1. Department of Defense Annual Report, Fiscal Year 1981 (Washington, D.C.: Government Printing Office, 1980), pp. 5, 65, 63.
- This criticism has also been made by Alexander L. George and Richard Smoke, Deterrence in American Foreign Policy: Theory and Practice (New York). Columbia University Press, 1974), passim; Robert Jervis, "Deterrence Theory Revisited," World Politics, 31 (January 1979), pp. 289-394.
- 3. On Presidential Directive 59, see Richard Burt's articles in *The New York Times*, 5, 11, and 12 August 1980.
- 4. Concise treatments of the evolution of strategic doctrine from the Kennedy to Carter administrations are provided by McGeorge Bundy, "Maintaining Stable Deterrence," *International Security*, 3 (Winter 1978), pp. 5-16; Francis P. Hoeber, "How Little Is Enough?," *International Security*, 3 (Winter 1978), pp. 53-73; Walter Slocombe, "The Countervailing Strategy," *International Security*, 5 (Spring 1981), pp. 18-27.
- 5. Department of Defense Annual Report, Fiscal Year 1980 (Washington, D.C.: Government Printing Office, 1979), p. 12.
- 6. The general approach and results of the CIA's analysis are described in the Department of Defense Annual Report, 1981, pp. 123-126. NIE 11-3-78, its results and methods, have been discussed by Michael Getler, "Soviet's Power Sparks Intelligence Rift," The Washington Post, 9 May 1980, pp. A1, A18; Rowland Evans and Robert Novak, "The Strategic Imbalance, The Washington Post, 3 December 1980, p. A19; Richard K. Betts, "Strategic Intelligence Estimates: Let's Make Them Useful," Parameters, 10 (December 1980), pp. 20-26; also see the testimony of Richard Pipes and Douglas Garthoff before US Congress, Permanent Select Committee on Intelligence, Hearings, Soviet Strategic Forces, (Washington, D.C.: Government Printing Office, 1980), pp. 2-34.
- 7. Paul Nitze, "Deterring Our Deterrent," Foreign Policy, 25 (Winter 1976-77), pp. 195-210; "Assuring Strategic Stability in an Era of Detente," Foreign Affairs, (January 1976), pp.207-232; "A Plea for Action," The New York Times Magazine, 7 May 1978. For a critique of Nitze's view, see Alan Tonelson, "Nitze's World," Foreign Policy, 35 (Summer 1979), pp. 74-90 and John Steinbruner and Thomas M. Garwin, "The Balance Between Prudence and Paranoia," International Security, 1 (Summer 1976), pp. 138-181.
- 8. Robert Jervis, "Deterrence Theory Revisited," pp. 314-322, and "Why Nuclear Superiority Doesn't Matter," *Political Science Quarterly*, 94 (Winter 1979-80), pp. 617-634, makes a similar point. He distinguishes between a "balance of resolve" and a "balance of military power," arguing that it is the former that counts.



- 9. See, for example, US Congress, Senate Committee on Foreign Relations, Effects of Limited Nuclear Warfare, and Briefing on Counterforce Attacks, (Washington, D.C.: Government Printing Office, 1975); US Congress, Office of Technology Assessment, The Effects of Nuclear Warfare, (Washington, D.C.: Government Printing Office, 1979); Sidney Drell and Frank von Hippel, "Limited Nuclear War," Scientific American, 235 (November 1976), pp. 27-37; Kevin N. Lewis, "The Prompt and Delayed Effects of Nuclear War," Scientific American, 241 (July 1979), pp. 35-47, and the forthcoming, Arthur M. Katz, Life After Nuclear War: The Economic and Social Consequences of Nuclear Attacks on the United States, (Cambridge: Ballinger, 1981).
- 10. Robert Jay Lifton, Death in Life: Survivors of Hiroshima, (New York: Simon and Schuster, 1976).
- 11. Eric J. Leeds, in his provocative study, No Man's Land: Combat and Identity in World War I, (Cambridge: Cambridge University Press, 1979) suggests that the bewildering and terrifying experience of trench warfare on the Western front was beyond the ability of combatants to understand in human terms. He explores the ways in which they sought to impose meaning and order upon their situation by invoking magic and ritual.
- 12. See C. Fritz and E. Marks, "The NORC Studies of Human Behavior in Disaster," Journal of Social Issues, 10 (January 1954), pp. 26-41; Martha Wolfensten, Disaster, (Glencoe, Ill.: Free Press, 1957), pp. 11-30; Irving L. Janis, "Psychological Effects of Warnings," in George Baker and Dwight Chapman, eds., Man and Society in Disaster, (New York: Basic Books, 1962), pp. 55-92.
- 13. Wolfensten, p. 20.
- 14. Voitech Mastny, Russia's Road to the Cold War, (New York: Columbia University Press, 1978), pp. 156-157.
- 15. Seweryn Bailer, Stalin's Successors: Leadership, Stability, and Change in the Soviet Union, (New York: Cambridge University Press, 1980).
- 16. For some of the debate on civil defense, see T. K. Jones and W. Scott Thompson, "Central War and Civil Defense," Orbis, (Fall 1978), pp. 681-712; Daniel Goure and Gordon H. McCormick, "Soviet Strategic Defense: The Neglected Dimension of the US-Soviet Balance," Orbis, (Spring 1980), pp. 103-127; William H. Kincade, "Repeating History: The Civil Defense Debate Renewed," International Security, 2 (Winter 1978), pp. 99-120.

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